

DSMS Auditbase  
Gary Ramah  
DSMS Security Engineer

There is an emerging initiative within forward thinking organizations that have viewed auditable controls as one of the most important capabilities in running a secure and efficient ground data enterprise. The DSMS Auditbase makes security controls a part of everyday business process within flight operations ground data systems. This poster explains how core enterprise flight operations ground data systems have been automatically audited and the results leveraged as enablers to implement scalable Information Security controls. These include on-line standardized audit templates covering IT and information systems, personnel (hiring/termination) processes, flight project end-user education, as well as traceable remedial action items, combined with routine risk and incident identification and closure.

The poster also explains the formal and effective distributed global team for both auditing and incident response within DSMS. DSMS and JPLnet processes for performing positive identity validation for remote access to the flight operations ground data systems or for any access to sensitive information at JPL. Finally server vulnerability scanners combined with enterprise desktop patching and anti-virus management and status detection systems will be discussed.

The current mindset, that auditing is a practice that is: time consuming, resource intensive, inaccurate, requires highly skilled practitioners, is too subjective or is simply too big a task to undertake and therefore can only be carried out infrequently needs to be changed. The DSMS flight operation Auditbase is intended to be a complete integrated auditing tool for operational flight systems. The Auditbase reduces the time required to complete a useful audit. Through the use of rich visual displays the effectiveness of a single individual's ability to audit large systems increases.

The most efficient way of ensuring high quality operations in production environments is through the use of a real time auditing process. Instead of periodically getting a snap shot of the operational process, like that provided by traditional off-line audit processes, the Auditbase provides a clear view of areas that need improvement by continually monitoring the operational processes in real time,

The Auditbase is a composite system consisting of items of interest, various data features about each item and a logical framework for dealing with the items and their associated data. Initially the Auditbase is configured to be aware of these items of interest. Once aware the Auditbase is able to continuously monitor various features of the items and present it's status of the group of items that make up the environment in various viewing formats. It's these viewing formats that allow an operator using the Auditbase to continuously audit the environment in real-time.

An audit, within the Auditbase is simply a specific viewing format onto the environment. Each item appearing on the Auditbase screen represents items that are either compliant or non-compliant with the associated operational policy. The Auditbase reduces the time taken to complete an audit, ensuring that the results of the audit are available immediately after the viewing format is chosen. Once the results of the audit are displayed the operator can readjust the viewing plane within the viewing format thus changing the data visibility to reflect the non-compliant items better.